

PLATE IV.

- Fig. 1. *Pardosa purbeckensis*, sp. n.
 a. Palpus of male from outside. *b*, bulb; *c.s.*, central spur; *d*, apical lamina; *e*, lateral lamina.
 b. Palpus of male from inside.
- Fig. 2. *Pardosa herbigrada*, Blk. Palpus of male from outside.
- Fig. 3. Ditto. Palpus of male from beneath.
- Fig. 4. *Pardosa purbeckensis*, sp. n. Palpus of male from beneath.
- Fig. 5. *Pardosa monticola*, Clk. Palpus of male from outside and beneath.
- Fig. 6. *Pardosa palustris*, Linn. Palpus of male from beneath.
- Fig. 7.
 a. *Pardosa purbeckensis*, sp. n. Palpus; central spur.
 b. *Pardosa palustris*, Linn. Palpus; central spur.
 c. *Pardosa monticola*, Clk. Palpus; central spur.
 d. *Pardosa herbigrada*, Blk. Palpus; central spur.
- Fig. 8.
 a. *Pardosa purbeckensis*, sp. n. Protarsus and tarsus i.
 b. *Pardosa palustris*, Linn. Protarsus and tarsus i.
 c. *Pardosa monticola*, Clk. Protarsus and tarsus i.
 d. *Pardosa herbigrada*, Blk. Protarsus and tarsus i.
- Fig. 9. *Pardosa purbeckensis*. Female; epigyne.
- Fig. 10. *Pardosa herbigrada*, Blk. Female; epigyne.
- Fig. 11. *Pardosa monticola*, Clk. Female; epigyne.
- Fig. 12. *Pardosa palustris*, Linn. Female; epigyne.
- Fig. 13. *Porrhomma egeria*, Sim.
 a. Female; central anterior eyes atrophied.
 b. Female; central posterior eyes atrophied.
 c. Male; eyes and clypeus, with relative widths.
 d.—1. Left palpus of male. 2. Falciform process.
- Fig. 14. *Porrhomma egeria*, Sim.
 a. Female; epigyne.
 b. Female; femur i. with three characteristic spines.

VI.—Descriptions of some new Species of Heterocera from the Eastern Islands and Tropical America. By HERBERT DRUCE, F.L.S.

Agaristidæ.

Agarista proerosia, sp. n.

Male.—Primaries rich reddish brown, crossed about the middle from the costal margin almost to the anal angle by a rather wide cream-coloured band; the veins and several indistinct markings near the base thickly irrorated with metallic steel-coloured scales; the fringe black: secondaries black-brown; a small space on the anal angle cream-colour; the fringe white. Underside of both wings brown, with the white markings as above. Head, thorax, and abdomen

black; front of head, underside of the palpi, and inner side of the tegulæ cream-colour; antennæ and upperside of palpi black; underside of the thorax and anus bright orange.—*Female* very similar to the male.

Expanse 3 inches.

Hab. Key Island (*Mus. Druce*).

Agarista daria, sp. n.

Female.—Primaries black, partly crossed from the subcostal vein by three white bands—the first two quite short, the third extending almost to the anal angle; a waved line of metallic-blue scales between each white band; the fringe black: secondaries pure white, broadly bordered with black; the fringe white. Head, antennæ, palpi, thorax, and abdomen black; four white dots on the front of the thorax; underside of the thorax orange; legs orange and black.

Expanse $2\frac{1}{2}$ inches.

Hab. Lindi (*Mus. Druce*).

This species is allied to *A. accurata*, Swinhoe.

Agarista puciolia, sp. n.

Male.—Primaries dark brownish black, irrorated with metallic scales along the veins at the base, and crossed from the costal margin to near the inner margin by three pale yellow bands—the first near the base, the second about the middle and widest near the inner margin, the third beyond slightly convex; the fringe black, white at the apex and anal angle: secondaries bright chrome-yellow. The outer and inner margin and a band crossing the middle of the wing from the costal dark brownish black; the fringe at the anal angle yellow. Head and thorax black, the thorax with three yellowish-white stripes; abdomen yellow, banded with black; legs yellow; antennæ black, the tips yellow.

Expanse 2 inches.

Hab. Philippine Islands (*Mus. Druce*).

Very distinct from any other species known to me.

Ægocera darocana, sp. n.

Male.—Primaries creamy white, the costal margin and a broken band crossing the wing beyond the middle blue-black, the apex black, irrorated with metallic scales; the fringe white: secondaries pale yellow, broadly bordered with black at the apex. Head and thorax black, the collar cream-

colour; abdomen with some spots at the base; the anus and underside black; the legs black; antennæ black.

Expanse $1\frac{1}{2}$ inch.

Hab. Lindi (*Mus. Druce*).

Zygænidæ.

Syntomis polusca, sp. n.

Male.—Primaries bright glossy bluish black; a small spot at the base, the cell, two spots below the cell, an oval spot on the costal margin, and two small spots beyond the cell all clear hyaline; the fringe black: secondaries yellow, broadly bordered with glossy bluish black. Head, antennæ, and thorax black; abdomen glossy blue-black, banded with yellow at the base and along each side; legs black.

Expanse $1\frac{3}{10}$ inch.

Hab. Philippine Islands (*Mus. Druce*).

Syntomis laomedia, sp. n.

Primaries black, a square spot at the base, the cell, and a row of three elongated spots crossing the wing beyond the cell all hyaline: secondaries deep black, with a small hyaline spot close to the base; the fringes of both wings black. Head, antennæ, thorax, abdomen, and legs black; the abdomen banded with yellow at the base and on the underside nearest the anus.

Expanse $1\frac{1}{4}$ inch.

Hab. Philippine Islands (*Mus. Druce*).

Syntomis chea, sp. n.

Primaries black; a streak at the base, the cell, a large square-shaped spot below the cell, and three oblong spots beyond the cell all hyaline: secondaries black, a spot at the base and a round clot at anal angle both hyaline. Head, thorax, abdomen, and legs black, the fourth segment of the abdomen bright orange-yellow; antennæ black, the tip white.

Expanse $1\frac{1}{2}$ inch.

Hab. Philippine Islands (*Mus. Druce*).

Eupyra sages, sp. n.

Male.—Primaries black, shot with bronze-green from the base to beyond the middle; hyaline white spots the same as in *E. Salmoni*, with the addition of a very small spot between the two nearest the apex: secondaries hyaline white, broadly

bordered with black, with two very minute hyaline white dots close to the apex. Head, thorax, and abdomen black; tegulæ and collar spotted with white; abdomen with a metallic-green band down the middle from the base to the anus, the sides spotted with white; antennæ and palpi black; legs black, banded with white.

Expanse 2 inches.

Hab. Bolivia (*Mus. Druce*).

Cosmosoma demantria, sp. n.

Primaries hyaline, the apex broadly bordered with black, the outer and inner margin edged with black; a spot at the end of the cell and the veins black: secondaries hyaline, the apex, outer and inner margin edged with black; antennæ black, tipped with white. Head, front of the collar, and a small spot on each side bright metallic blue; thorax, abdomen, and legs bright vermilion-red; abdomen with a bright metallic-blue band, extending from the base to the anus; the underside of the abdomen black and white.

Expanse $1\frac{3}{4}$ inch.

Hab. Dominica (*Mus. Druce*).

Eunomia daltha, sp. n.

Primaries hyaline, veins and margins black; the base of the wing black, shot with blue: secondaries hyaline, broadly bordered with black from the apex to the anal angle; a small hyaline spot on the black margin close to the apex. Head and antennæ black, a small white spot on each side of the head; collar metallic blue; tegulæ black, with a white spot at the base and a blue line on the inner side; thorax and abdomen black, the latter banded with blue on each segment; abdomen with some white spots on each side; anal tuft black and red; front of the palpi, underside of thorax, and abdomen white.

Expanse $1\frac{3}{4}$ inch.

Hab. Para (*Mus. Druce*).

Belemnica splendens, sp. n.

Male.—Primaries black, shot from the base not quite to the middle with metallic green, beyond which a dull red band crosses the wing near the apex, but does not reach either margin; the fringe black: secondaries brilliant morpho-blue, bordered with black from the apex to the anal angle; upon the black border are a submarginal row of bright carmine

spots, which become indistinct near the anal angle. Head, antennæ, and palpi black; collar black, spotted with metallic green; thorax black, striped with metallic green; abdomen bright metallic blue, with a narrow black line down the middle from the base to the apex, the underside bright carmine. Underside: both wings black, shot with bright blue at the base; primaries with a wide U-shaped carmine mark in the middle of the wing, but not touching either margin; secondaries broadly banded on the outer margin with carmine.

Expanse 2 inches.

Hab. Bolivia (*Mus. Druce*).

Arctiidæ.

Ischnognatha striata, sp. n.

Male.—Primaries brownish black, the veins yellow; a wide pale yellow band crosses the wing beyond the middle from the costal margin to the anal angle: secondaries bright yellow, broadly bordered with black on the costal, outer, and inner margins. Head yellow; thorax and abdomen black, front of the thorax and sides of the abdomen banded with yellow; underside of the abdomen yellow; anus, antennæ, and legs black.

Expanse $1\frac{3}{4}$ inch.

Hab. Costa Rica.

Cratoplastis romula, sp. n.

Male.—Primaries greyish black, the veins slightly paler near the base; a large oval semihyaline white spot at the end of the cell; the fringe dark grey: secondaries semihyaline white, broadly bordered with bluish black on the costal margin, at the apex, outer and inner margin. Head and anus bright orange; antennæ, thorax, and abdomen greyish black; a greyish-white line extends from the base of the abdomen almost to the anus; legs greyish black.

Expanse $1\frac{1}{2}$ inch.

Hab. Costa Rica.

Eucereon darantasia, sp. n.

Female.—Primaries dark brown; the veins, a line beyond the cell, and a waved submarginal line pale brown; a whitish spot in the middle of the cell; the fringe dark brown: secondaries dusky semihyaline from the base to about the

middle. Underside of both wings dusky black, almost without markings. Antennæ and palpi black; head, thorax, abdomen, and legs dark brown; tegulæ dark brown, edged with chrome-yellow; anus chrome-yellow on the upperside.

Expanse 2 inches.

Hab. Costa Rica.

Eucereon rububa, sp. n.

Male.—Primaries dusky white, clouded with dark brown about the middle, at the apex, and along the outer and inner margin: secondaries semihyaline white, clouded with brown at the apex and very slightly along the outer margin. Head, antennæ, palpi, thorax, abdomen, and legs all black.

Expanse $1\frac{1}{4}$ inch.

Hab. Costa Rica.

Pseudapistosia saduca, sp. n.

Male.—Primaries dark brown, crossed from the costal to the inner margin with four bands of pale greyish brown, the two bands nearest the outer margin broken into small lines near the anal angle: secondaries dusky hyaline white, the veins dark brown, the apex and outer margin dark brown. Head white; palpi, antennæ, and legs dark brown; thorax and basal segments of the abdomen dark brown; abdomen chrome-yellow, each segment edged with brown.—*Female* very similar to the male, but altogether darker in colour, and with the base of the abdomen banded with yellow; the underside of the abdomen in both sexes deep black.

Expanse, ♂ 2, ♀ $2\frac{1}{2}$ inches.

Hab. Mexico (*Mus. Druce*); Costa Rica.

In the Mexican specimens before me the secondaries of the females are darker in colour than those from Costa Rica.

PERICOPINÆ.

Eucyane rhætia, sp. n.

Male.—Primaries deep black, dark blue at the base, crossed beyond the middle by a narrow white band, which extends from the costal margin to the anal angle; the fringe white at the apex, black on the outer margin: secondaries black, shot with bright dark blue at the base and along the inner margin; a row of four very minute white spots close to the anal angle; the fringe white. Head, antennæ, palpi, and thorax black; abdomen above dark blue, on the underside dark red; legs black, banded with white.—*Female* similar to the male, but

larger, not shot with blue at the base of the primaries; a round red spot about the middle of the costal margin on the primaries.

Expanse, ♂ 2, ♀ 3 inches.

Hab. Bolivia (*Mus. Druce*).

Eucyane dejanira, sp. n.

Primaries black, crossed about the middle from the costal to the inner margin by a wide white band; a large red round spot on costal margin on the inner side of the white band, but not joined to it; the fringe black: secondaries blue-black, with a wide white band partly crossing the wing near the apex; the fringe white at the apex and near the anal angle. Head, antennæ, thorax, and legs black; abdomen blue-black above on the underside; the three anal segments are edged with reddish brown.

Expanse $2\frac{1}{4}$ inches.

Hab. South Brazil (*Mus. Druce*).

Eucyane ruscia, sp. n.

Male.—Primaries black, crossed from the middle of the costal margin to the anal angle by a wide orange-yellow band: secondaries blue-black, with three orange-yellow spots on the middle of the outer margin; the fringe of both wings black; head, palpi, antennæ, and thorax black; abdomen blue-black.

Expanse $2\frac{1}{4}$ inches.

Hab. Bolivia (*Mus. Druce*).

Pericopsis meta, sp. n.

Primaries black, crossed about the middle by a wide uneven pale yellow band, which becomes narrow near the apex; a row of small yellow spots close to the apex, and a submarginal row of small spots extends from the apex to the anal angle; the fringe black: secondaries pale yellow; the veins black, each vein being broadly edged with black on both sides; the outer margin narrowly edged with black. Head, antennæ, thorax, and legs black; abdomen dark brown above, pale yellow on the underside.

Expanse 3 inches.

Hab. Colombia (*Mus. Druce*).

Anthomyza Swainsoni, sp. n.

Anthomyza tiresia, Swains. Zool. Ill. ser. 2, vol. iii. t. cxxiv. fig. 1;
Dunc. Nat. Libr., Exot. Moths, p. 97, t. iv. fig. 2 (nec Cramer).

Hab. South-east Brazil (*Mus. Druce*).

The species figured by Swainson and Duncan is quite distinct from that figured by Cramer, and requires to be named. The specimens before me are identical with both figures above quoted.

Anthomyza brotes, sp. n.

Male.—Primaries deep black, crossed by two pale yellow bands, the first about the middle, the second beyond near the apex, the veins crossing the yellow bands black; four small white dots at the apex and two close to the anal angle; the fringe black: secondaries pale primrose-yellow, very broadly bordered with black; the veins black; a spot at the apex and four small dots on the outer margin near the anal angle all white. Head, antennæ, and thorax deep black; abdomen blackish brown, on the underside pale cream-colour; legs black above, yellowish white on the underside.—*Female* very similar to the male, but slightly larger.

Expanse, ♂ 3, ♀ $3\frac{1}{4}$ inches.

Hab. British Guiana (*Mus. Druce*).

Anthomyza praxila, sp. n.

Male.—Primaries black, with three white spots on the costal margin close to the base and a triangular yellow mark on the inner margin near the base; a wide semihyaline band crosses the wing about the middle from the costal margin almost to the inner margin, but not quite reaching it, beyond which a narrow semihyaline band partly crosses the wing near the apex; a submarginal row of seven white spots extends from the apex to the anal angle: secondaries semihyaline from the base to about the middle; the outer half of the wing deep black, with a marginal row of large white spots extending from the apex to the anal angle. Head, antennæ, thorax, and upperside of abdomen black, the underside yellowish; the base of the thorax banded with white.—*Female* similar to the male.

Expanse, ♂ ♀, $3\frac{1}{2}$ inches.

Hab. Colombia (*Mus. Druce*).

Anthomyza Buckleyi, sp. n.

Male.—Primaries brownish hyaline; the base, a band crossing the wing at the end of the cell, the apex, costal, outer, and part of the inner margin all black; the costal margin close to the base spotted with yellowish white; a triangular yellowish-brown mark on the inner margin; four white dots on the apex and two on the outer margin near the anal angle:

secondaries brownish hyaline, bordered with black from the apex to the anal angle, and a submarginal row of white dots; the veins and fringes of both wings black. Head, antennæ, thorax, and abdomen black; the collar and tegulæ spotted with white; underside of the abdomen pale yellowish brown.—*Female* very similar to the male, but paler hyaline.

Expanse, ♂ $3\frac{4}{10}$, ♀ 4 inches.

Hab. Ecuador (*Mus. Druce*).

Laparidæ.

Xenosoma gigantea, sp. n.

Primaries and secondaries semihyaline white; primaries slightly shaded with yellow at the base and along the inner margin; the fringe of both wings white. Head, underside of thorax, and legs pale yellow; antennæ black; thorax and abdomen yellowish white.

Expanse $2\frac{3}{4}$ inches.

Hab. British Honduras (*Mus. Druce*).

Notodontidæ.

Tifama (?) *dardania*, sp. n.

Female.—Primaries: the base and the costal margin nearly to the apex dark brown, shading inwardly to about the middle of the wing to bright reddish brown, where it is thickly irrorated with white scales; from the middle of the wing to the outer margin pale primrose-colour; the apex almost pink; two small dark yellow spots on the middle of the outer margin; the fringe primrose-colour, excepting at the apex, where it is almost pink: secondaries greyish brown, shading to pale primrose-colour on the outer margin; the fringe primrose-colour. Head and antennæ reddish brown; collar pale yellow, shot with reddish brown; tegulæ silver-grey; thorax and abdomen brown, the sides of the abdomen and the anus yellow; legs brown.

Expanse 3 inches.

Hab. Costa Rica.

Heterocampa argentata, sp. n.

Primaries silvery grey; the costal margin, inner margin, and veins near the inner margin spotted with black; a rather large black spot close to the anal angle; the fringe alternately black and grey: secondaries pale greyish fawn-colour, dusky at the apex and round the outer margin; a small

black spot at the anal angle. Head, thorax, and tegulæ silvery grey; antennæ yellowish brown; abdomen greyish fawn-colour; legs grey.

Expanse $2\frac{1}{4}$ inches.

Hab. Costa Rica.

Nystalea sambana, sp. n.

Female.—Primaries dusky grey, with several reddish-brown spots at the apex; a black curved line crosses the wing near the base from the costal to the inner margin; a large silvery-grey patch at the anal angle, extending partly along the inner margin: secondaries pale grey, broadly bordered from the apex to the anal angle by darker grey; the fringe silvery grey. The head, collar, and tegulæ yellowish brown; thorax silvery grey; abdomen dusky grey; underside pale grey; anus yellowish brown.

Expanse $2\frac{3}{4}$ inches.

Hab. Costa Rica.

Nystalea demea, sp. n.

Male.—Primaries greyish fawn-colour; two small black dots at the end of the cell, from which a black line bordered with reddish brown and with a small white streak in the middle extends to the outer margin; a dark brown spot and streak on the inner margin close to the base; several faint brown marks near the anal angle: secondaries dusky fawn-colour, darkest at the apex and round the outer margin; the fringe pale greyish fawn-colour. The head and front of the thorax reddish brown; antennæ yellowish brown; tegulæ and thorax greyish fawn-colour; the base of the abdomen yellowish, the upperside of the abdomen blackish grey, underside paler; the anal tuft greyish fawn-colour.—*Female* very similar to the male, but larger and rather darker in colour.

Expanse, ♂ $2\frac{1}{2}$, ♀ 3 inches.

Hab. Costa Rica.

VII.—*On some new and rare Crustacea from Scotland.* By THOMAS SCOTT, F.L.S., Naturalist to the Fishery Board for Scotland, and ANDREW SCOTT, Fisheries Assistant, University College, Liverpool.

[Plates V. & VI.]

IN the following notes we propose to record some interesting Scotch species of Copepoda, including, among others, a few that appear to be undescribed, and also a curious form